Profiles of Engineering Students

Brett Grunert

Graduate Student
University of Colorado, Boulder; Doctorate in Civil Engineering, emphasis Geotechnical

Prior Education:
B.S. Civil Engineering
California State University Northridge

Education in Progress:
Graduate Student
University of Colorado, Boulder; Doctorate in Civil Engineering, emphasis Geotechnical

Advice to Students:
"Don't limit yourself; if you believe that engineering is the profession you wish to pursue then pursue it to the fullest. You'll find it is more rewarding than you ever imagined."

Interview:

► Q: When did you know you wanted to become an Engineer?
► Grunert: Last semester of high school.

► Q: What is your college experience like in terms of the amount of time you find you need to study each day?
► Grunert: The beginning courses required possibly 3-5 hours per week, while the upper-level classes demanded up to 10 hours per week.

► Q: Are you incorporating any work experiences while you are a student? (include both internships/co-ops and any other jobs you may be holding while in school)
► Grunert: I held a part-time job at an engineering firm for the last 4 semesters of my undergraduate career, and worked full-time in the summer.

► Q: How did you prepare for your college experience?
► Grunert: My high school offered AP classes and university credit options that I took advantage of. These courses helped me to enroll in engineering classes prior to the average student.
Q: Did/do you have a mentor that has helped guide you thus far? (If so, describe the impact of this person on your education and career plans)
Grunert: My Academic Advisor and ASCE Practitioner Advisors have served as exceptional role models and have provided invaluable advice to me. They stressed the importance of ethics in engineering and becoming actively involved in professional societies.

Q: Is there a specialty area you have focused on in engineering? If so, what is it, and how did you decide on this specialty? Also, at what point in your college experience did you decide?
Grunert: From my work experience and by interviewing professors and professionals, I decided during the summer before my senior year that I would pursue the geotechnical aspect of civil engineering. The decision was not easy by any means, but I knew that it would be an intriguing, challenging and rewarding discipline, allowing for both critical thinking and creativity.

Q: Is it hard to balance your engineering studies with other college activities (entertainment, travel, having fun)?
Grunert: With good discipline, the balancing act is not hard; the hardest part is choosing the aspect of life which will be sacrificed at a certain time. I was a 4-year intercollegiate athlete, served as a leader of the ASCE student chapter, worked part time, held a rewarding social life and traveled around the country. This lifestyle required picking and choosing and I could not please everyone all the time. The best advice I can give is to make sure that your current activity is the best use of your time and you will not regret it later.

Q: Do you find yourself studying more in a team situation or alone? Do you have a preference?
Grunert: I was a solitary studier; I had a very difficult time studying in a group as I had the tendency to turn it into a more social atmosphere. I preferred to attempt problems on my own and seek out classmates’ advice if I encountered a problem.

Q: What’s the hardest thing you have found about your college experience working toward a degree in engineering?
Grunert: Frustration was a common occurrence for me as I always sought perfection in my homework and tests. It’s important to be resilient and learn from your mistakes rather than let them defeat your morale.

Q: What’s the most rewarding aspect about working toward a degree in engineering?
Grunert: It’s very rewarding to look back at the knowledge I obtained and the critical thinking skills that I’ve developed while working towards a degree in engineering.

Q: Do you think you’ll continue studying engineering, or do you think you’ll switch to another area? Why?
Grunert: I will definitely continue studying engineering because it is fascinating to me and the world is in great need of competent engineers. I know that my education in engineering will benefit countless numbers of people during and after my career.

Q: Do you have any idea what sort of industry or work you’d like to do when you graduate? If so, how did you find out about this industry or field?
Grunert: As mentioned earlier, I have chosen to work in the geotechnical engineering industry. I was introduced to it through part time work during my undergraduate career.
Q: Do you think you'll want to pursue additional degrees after you complete the one you are working on? Why or why not?
Grunert: I have chosen to pursue a graduate degree and will work up to a doctorate level. I think it's important to learn as much as possible in a given field, through both the academic and professional worlds.

Q: Did you think that school will prepare you for the way the work gets done in the real world?
Grunert: I've found that it provides a necessary background. The real world will fine-tune and concentrate the broader skills learned in school.

Q: How many engineering schools did you apply to? How many accepted you?
Grunert: For undergraduate programs, I don't quite remember the exact number as I applied to schools based on NCAA Swim Teams and premedical programs. I switched to civil engineering after I applied to the schools, and after being accepted to all, chose to attend the best overall fit for me.

Q: Did you have a "first choice?" Were you accepted into your "first choice?"
Grunert: During the application process, I did not have a first choice. I spent more time prioritizing the schools after being accepted to them.

Q: How did you decide which college/university to go to?
Grunert: I needed to choose the school that seemed the best for me in terms of lifestyle, academic program, and campus community. The most important questions I asked myself were, "Will I be proud to say I attended this college/university?" and "Can I contribute to making this college/university better?"

Q: What should high school students be doing to prepare themselves to take on the work that engineering students do?
Grunert: They should learn to treat every course and subject as important to their career; they will find that most things learned in the classroom will show up again in their career, whether it's math, chemistry, writing, or even art. The more aware of various subjects you become, the more likely you'll be promoted to a higher level throughout your career. Engineering is much more than just mathematical problem-solving; it involves interacting with all ranges of people.